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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,942	07/30/2003	Lichen Wang	M-15074-1P US	1753

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EXAMINER

DANG, HUNG Q

ART UNIT PAPER NUMBER

2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/631,942

Applicant(s)

WANG ET AL.

Examiner

Hung Q. Dang

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 9-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to applicant's response to restriction requirement. Applicant's election without traverse of group I, claims 1-8, in the reply filed on 2/26/2007 is acknowledged and the restriction requirement is final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee U.S. Patent 6,556,187.

Regarding claim 1, Lee discloses a wireless data transmission method, comprising:

- providing a first data segment (Figure 5, "Byte 1" is the first data segment);
- Verifying that the first data segment includes a desired constant (column 3, lines 36-60; the constant in this case can be the device's ID, with respect to each transmission);

Art Unit: 2612

- Providing a variable second data segment that indicates making a key or breaking a key (column 3, lines 62-65; Byte 2 is the second data segment; "key pressed" = key making; "key released" = key breaking);
- Providing a third data segment to indicate a context code (paragraph bridging columns 3-4); and
- Providing a fourth data segment as an error check of the second and third data segments (column 4, lines 7-10).

Regarding claim 3, the second data segment disclosed by Lee also indicates the releasing of a single pressed key (column 3, lines 62-65).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee U.S. Patent 6,556,187.

Regarding claim 8, Lee teaches the method of claim 8 with a checksum algorithm. However, Lee does not specifically teach a "**cyclic redundancy**" checksum algorithm. The examiner takes official notice that cyclic redundancy checksum

algorithm has been commonly used in data communication systems for solving transmission errors. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide cyclic redundancy checksum algorithm to the wireless data transmission method disclosed by Lee in order to solve data transmission errors.

6. Claims 2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee U.S. Patent 6,556,187 in view of Kuo U.S. Patent 6,760,773.

Regarding claim 2, as mentioned above, Lee teaches the method of claim 1 containing a constant in the first data segment, except wherein said data in the first segment is represented by hexadecimal **FF**.

Kuo, in the same field of endeavor, teaches a wireless data transmission method for transmitting make codes and break codes from a keyboard, wherein said codes are represented by hexadecimal codes (column 2, lines 37-46). Even though, Kuo does not specifically disclose that the first data segment is a hexadecimal **FF**, however, the specification of this application does not disclose the criticality as to why the data segment has to be hexadecimal **FF** (any hexadecimal representation would be functionally equivalent as "FF").

Therefore, it would have been obvious to one skilled practitioner to derive such hexadecimal code (**FF**) (or any other hexadecimal code) to represent the first data segment disclosed by Lee in view of Kuo through routine experimentations.

Claims 4-7 are rejected for the same reasons as the rejection of claim 2.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Q Dang
3/14/2007
H.D.



BRIAN ZIMMERMAN
PRIMARY EXAMINER